



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,036	04/15/2004	William Puskas	56726-028 (NEUL-129CP1)	7416
7590 05/11/2006 McDermott, Will & Emery 28 State Street Boston, MA 02109			EXAMINER BUDD, MARK OSBORNE	
			ART UNIT 2834	PAPER NUMBER

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,036

Applicant(s)

PUSKAS, WILLIAM

Examiner

Mark Budd

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-23 and 83-129 is/are pending in the application.
- 4a) Of the above claim(s) 97-129 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19, 20, 83, 84 and 89-92 is/are rejected.
- 7) ☒ Claim(s) 21-23, 85-88 and 93-96 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-18-04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Art Unit: 2834

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19, 20, 83, 84 and 89-92 are rejected under 35 USC 103 (a) as being ^{un}~~an~~ patentable over Karatjas ~~interview~~ of Murray. Karatjas (see figure 5 and column 4 line 46-column 7 line 3 and column 8 line 23-column ¹⁰~~89~~ line 65) teaches a multi-generator system for producing ultrasound at selected different frequencies including one or more transducers comprising a generator section having a first generator circuit for producing first ultrasonic drive signals ^{and} ~~at~~ a second generator circuit for producing second ultrasonic drive signals the generator having an output unit connecting the drive signals to transducers each generator having a first relay (manually operated switch) initiated by a user ^{where in} ~~where in~~ either the first or the second drive signals are connected to the output ~~you that~~ selectively. Karatjas only teaches operation at specific frequencies (10, 20, 30 kHz) rather than a range of frequencies. However, Murry (see the abstract) teaches that, depending on the job to be performed, providing a frequency range rather than a single specific frequency to ^{an} ~~a~~ ultrasonic transducer can result in a more efficient device. For example, in cleaning, frequency ranges help to produce cavitation which in turn aids in cleaning. In bonding and drilling, providing an envelope of power, or sweeping the frequency assures that the instantaneous ^{resonance} ~~resonance~~ is provided as the load changes the resonant point of the system. Thus, for at least these reasons it would have been

Art Unit: 2834

obvious to one of ordinary skill of the art to provide the generators of Karatjas with frequency range capabilities. Regarding claims 20, 84 and 92, it is ~~long~~ ^{has been} held that optimization of a known device for a particular application (for example through routine experimentation) is ~~within~~ ^{within} the skill expected of the routineer. Kartjas operates at 36 ~~volts~~ ^{voltage} (column 9 lines 23-36). To select a different operating voltage would have been ^{one of} obvious to ~~what~~ ordinary skill in the art.

Claim 21-23, 85-88 and 93-96 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Budd whose telephone number is 571-272-2019. The examiner can normally be reached on Monday-Thursday from 6 a.m. to 4 p.m.

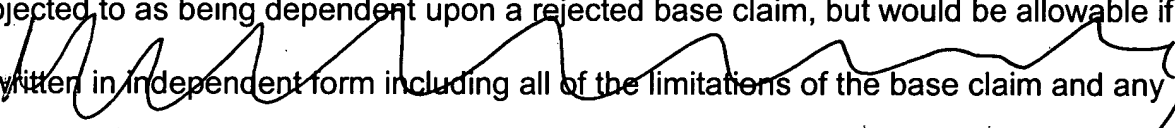
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karen Schuberg, can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2834

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mark Budd
Primary Examiner
Art Unit 2834


objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.